5. (Amended) The method of claim 4 wherein said primers are essentially as set forth in Figure 6 (SEQ ID NOS: 3-42).

REMARKS

Reconsideration is respectfully requested in light of the foregoing Amendment and remarks which follow.

Claims 1-5 are before the Examiner. Claim 6-21 have been withdrawn from consideration under Rule 142(b) as directed to a nonelected inventions.

Claim 1 has been amended to more clearly set forth the process steps employed is defining the nucleic acid molecule that is either cloned or amplified in the process. Claim 2 is amended to correct a matter of form. Claim 3 is amended to be consistent with changes in claim 1. Claim 5 has been amended to recite the relevant sequence identifying numbers. No new matter is believed to have been added and entry of the amendment is respectfully requested.

It is respectfully requested that the drawing corrections be held in abeyance until the application is in condition for allowance.

It is noted that the Examiner has treated the election of the claims of Group I as being one with out traverse for the reasons set fort in the Office Action on page 2.

Claim 5 is objected to as failing to properly identify the "SEQ ID NO:" being claimed pursuant 37 CFR 1.821(d). The claim has been amended to recite the requisite SEQ ID NOS.

Claims 1-5 are rejected under 35 USC 112, first paragraph, because the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. Applicants respectfully traverse.

The Examiner has found that the specification enables a process for the preparation of a nucleic acid molecule encoding a mouse T-cell receptor(TCR) which recognizes an antigen wherein the process includes: administering the antigen to a transgenic mouse whose genome

comprises HLA-A2 molecule wherein said mouse functionally expresses HLA-A2 on the surface of antigen presenting cells so as to allow presentation of the antigen with an HLA-A2 molecule such that the recognition of the antigen and HLA-A2 molecule by cytotoxic T lymphocytes (CTL) occurs, isolating the CTL from the mouse, creating antigen-specific CTL populations and isolating the nucleic acid molecule encoding human HLA-specific TCR using RT-PCR. The Examiner finds that the specification does not reasonably provide enablement for preparing a nucleic acid molecule encoding a Human HLA-restricted TCR specific for a TAA using any transgenic non-human vertebrate by cloning or amplifying a nucleic acid molecule.

Claim 1 is directed to a one step process wherein a nucleic acid molecule defined in terms of its process of preparation is either cloned or amplified to enhance the amount present. A process claim merely needs to recite one process step. This the claim does. There is no prohibition regarding the use of a product by process claim format to define a product component.

The amendments to the process definition for the product address the points regarding the apparent breadth of transgenic non-human vertebrate in light of the asserted unpredictability of transgenic techniques. The confusion regarding " human HLA restricted" is corrected by the amendment. It now modifies the cytoxicity of the TLC. TAA is defined in terms of the a "Markush" group. The group is disclosed on page 7 of the specification in the first complete paragraph. The breadth of "any non-human TCR" by the definition of the transgenic animal as being a mammal or avian species. Please note that the transgenic source is not disclose as being critical to the disclosed invention. The points raised by the Examiner in connection with "mere expression of one HLA" and "effected by PCR" are also addressed by the amendments to claims 1 and 4.

It should be noted that a proper prima facie case regarding establishing the presence of "undue experimentation" with regard to each of the items enumerated by the examiner has not been made out. It is not clear why extrapolating from the core materials, steps and conditions

found by the Examiner to be enabled to "known" equivalents cover by the claims would involve anything more than routine trail and error experimentation is not clear. Mere assertion of claim breadth or the infancy does not establish undue experimentation. The amendments above were undertaken to advance prosecution.

Claims 1-5 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse.

The claims have been amend to address the points raised in the Official Action.

Please note that a process claim merely needs to recite only one step which the amended claims do. "at least one" is a long accepted claim limitation as is "essentially".

Withdrawal of the rejection is respectfully requested.

Claims 1-5 are rejected under 35 USC 103(a) as being unpatentable over Man et al. in view of Cole et al. Applicants respectfully traverse.

The rationale for the finding of obviousness appears to be based on an obvious to try rationale. The Examiner notes one of the deficiencies of Man et al.- Man et al. does not teach using the trangenic mouse to identify tumor associated antigens. The reference also clearly does not teach all the elements needed to create a transgenic mouse that could be used in that fashion.

Additional references are cited. These references merely show the existence of additional elements. The mere existence alone does not suggest its combination with others to arrive at an invention not envisioned by any of the references.

Since a proper prima facie case of obviousness has not been established, withdrawal of the rejection as stated is respectfully requested.

Having addressed all of the objections and rejections the application is believed to be in condition for allowance and a notice to that effect is respectfully requested.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 313332000100. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Dated: March 9, 2000 By: _____

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